### United States Department of the Interior Interagency Land Retirement Team

2666 N. Grove Industrial Drive, Suite 106 Fresno, CA. 93727-1551







SCC-112 LND-5.00

Kate Hansel CALFED Bay-Delta Program 1416 Ninth Street, Suite 1155 Sacramento, California 95814

Subject: Category III Request For Proposals

Dear Ms. Hansel:

Enclosed are ten copies of the Panoche-Silver Creek Riparian Habitat & Flood Control Corridor project proposal in response to the RFP for Category III funding. This is a watershed-wide project and implementation of this proposal will assist CALFED in reducing the flow of contaminants into the San Joaquin River.

Should you need any clarification or additional information, or if you would like further information on the CVPIA Land Retirement Program, please call me at 209-487-5280. Thank you for the opportunity to participate in this program.

Sincerely,

Tracy Rowland

BLM Land Retirement Team Member

CVPIA Land Retirement Program

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## CALFED Bay-Delta Program

# Request For Proposals 1997 Category III Ecosystem Restoration Projects and Programs

Panoche-Silver Creek Riparian Habitat & Flood Control Corridor

Submitted by:
Bureau of Land Management
Hollister Resource Area
Hollister, CA

#### I. Executive Summary

a. Project Title: Panoche Creek-Silver Creek Riparian Habitat

& Flood Control Corridor

Applicant: Hollister Resource Area, USDI Bureau of Land Management

#### b. Project Description and Primary Biological/Ecological Objectives

The project will acquire land along Panoche Creek to provide flood control, riparian and upland habitat, and water quality improvements in both Panoche Creek and in the San Joaquin River as well as providing agricultural drainage source reductions. This corridor will serve as an open space greenbelt and wildlife corridor, and will also provide some recreational benefits to the local community.

#### c. Approach/Tasks/Schedule

Phase I is Acquisition and includes appraisals to determine fair market value, environmental analysis, hazmat survey, land use planning and actual purchase of the lands. This project proposal will focus on acquisition of a corridor along Panoche Creek from Mendota to I-5, approximately 17 miles long and 1 mile wide. Phase I is expected to take approximately 3 years.

Phase II involves project design, and the actual location and specifications for construction of the stream channel and any contouring or microtopography involved in habitat restoration of the corridor. Phase II is expected to take 9 to 12 months, and planning would begin in year 2 of Phase I so as to be completed by the end of Phase I.

Phase III is the implementation phase. Construction of the channel, restoration of habitat and the implementation of long-term land management and monitoring for flood control, drainage reduction, habitat restoration and utilization success and water quality improvement.

This proposal requests funding for Phase I only.

#### d. Justification for Project and Funding by CALFED

This project is compatible with CALFED objectives and directly impacts a CALFED-identified stressor, water quality of San Joaquin River. The habitat restoration will provide seasonal riparian and upland habitat which will benefit several T&E species as well as resident and migratory bird species.

This project is a partial solution to an ongoing management problem and is authorized under the CVPIA Land Retirement Program. CALFED funding will be leveraged with land retirement funds and other partnership dollars.

#### e. Budget Costs and Third Party Impacts

We are requesting a block grant for acquisition of lands in the amount of \$4 million dollars. We do not expect any significant third party impacts to occur as a result of this project, as lands will be acquired from willing sellers.

#### f. Applicant Qualifications:

Applicant is a federal land-management agency willing and able to restore and manage these lands in a manner that is consistent with CALFED objectives. Applicant is part of CALFED group. Applicant has experience with similar projects and a demonstrated track record.

#### g. Monitoring and Data Evaluation

To determine the effects of the project, monitoring will be done on a regular basis, according to a monitoring plan as defined in the NEPA/Land Management Document that will be completed prior to Phase I. Proponent has begun gathering preliminary data and expects to begin the NEPA process by September 1997 and to complete this plan by December 1997.

Resources to be monitored will include water quality sampling of Panoche Creek and groundwater in the corridor, depth to groundwater in and near retired lands, transects to determine habitat restoration success and transects to determine use of habitat by targeted species. Data collection will be in coordination with other programs like the San Joaquin River Management Plan (SJRMP), San Joaquin Valley Endangered Species Recovery Program (ESRP) and local water and drainage district sampling.

# h. Local Support/Coordination with other Programs/Compatibility with CALFED objectives:

This project has local support and is being done in partnership with ranchers, farmers and other local citizens, local water and resource conservation districts, several state and federal agencies, organizations and programs, such as CVPIA Land Retirement Program, CVPIA b(1)"other" program, and the CVP Conservation Program. (See part II(f) for list of participants). This project has also received some EPA Clean Water Act grant funding for an erosion/sediment source assessment and mapping project.

This project is compatible with CALFED objectives and will assist in reducing contaminant loading and salinity in the San Joaquin River. The project will improve/restore seasonal riparian habitat as well as upland habitat which will provide benefits for listed species such as the San Joaquin kit fox,, blunt-nosed leopard lizard, proposed listed species such as tricolored blackbird

and California- threatened Nelson's antelope ground squirrel, and other resident plant and wildlife species and migratory bird species.

#### II. Title Page

a. Project Name:

Panoche-Silver Creek Riparian Habitat & Flood Control Corridor

b. Applicant:

USDI, Bureau of Land Management

Hollister Resource Area 20 Hamilton Court Hollister, CA. 95023

Principal Contact: Tracy Rowland

BLM Representative, CVPIA Land Retirement Team

2666 N. Grove Industrial Drive, Suite 106

Fresno, CA. 93727

phone: 209-487-5280

fax: 209-487-5130

e-mail: trowland@mp.usbr.gov

c. Type of Organization & Tax Status: U.S. Government, Tax-exempt

d. Tax I.D. # N/A

e. Technical & Financial Contact Person: Tim Moore

phone: 408-637-8183 Fax: 408-637-5218

e-mail: tmoore@ca.blm.gov

#### f. Participants/Collaborators

This project is a partnership between ranchers, farmers and local citizens, City of Mendota, Broadview Water District, Bureau of Land Management, Bureau of Reclamation, U.S. Fish & Wildlife Service, U.S. Geological Survey, Natural Resources Conservation Service, Environmental Protection Agency, California Department of Water Resources, California Regional Water Quality Control Board, California Department of Fish & Game, Cal-Trans, Consolidated Farm Service Agency, Cooperative Extension Service, Firebaugh Canal Water District, Westlands Water District, Westside Resource Conservation District, San Benito Resource Conservation District, Silver Creek Drainage District, Fresno County Department of Public Works, and the San Joaquin Valley Drainage Program.

g. RFP Project Group Type: Acquisition

#### III. Project Description

#### a. Project Description and Approach

Lands will be acquired along Panoche Creek to provide flood control, riparian habitat restoration and water quality improvements as well as agricultural drainage source reduction.

Flood flows and erosion will be reduced by enlarging the Panoche Creek channel and allowing it to form a meander zone. Formation of a healthy, functioning riparian system will allow for storage of these selenium laden sediments within the meander belt. This will result in the reduction of contaminants transported to water conveyance facilities and the San Joaquin River and Mendota Pool. Seasonal riparian habitat will be restored to the system over time through a series of activities such as plantings and natural seeding, mulching, etc.. Cottonwood and willow plantings, from local sources, will be the primary focus of the restoration effort. Development of standing water wetlands will be avoided unless groundwater quality is higher than expected as shown by subsequent monitoring. Upland habitats would be restored to saltbush scrub and grasslands, the final mix being dependent upon the soil types. Invasive, non-native perennial species, such as tamarisk, would be discouraged through vigorous control within the project and coordination with land owners and land managers within the watershed.

Lands acquired from willing sellers, as part of this project, in cooperation with the CVPIA Land Retirement Program will be removed from irrigated agricultural production to reduce drainage, restore habitat and to improve the quality of groundwater and the San Joaquin River. Additional funding is expected to come from CALFED, CVP Conservation Program, and CVPIA b(1) "other" program.

#### b. Location and/or geographic boundaries of project

Project is located in Fresno County, in the Westlands Water District. The boundaries are defined as the Panoche-Silver Creek watershed, (see Figure 1). The Panoche-Silver Creek watershed occupies 291,500 acres in western Fresno and southeastern San Benito counties. The upper watershed is bounded by I-5 on the east and the Diablo crest on the west, and the lower watershed below I-5 to the San Joaquin River. The upper watershed is 181,000 acres and the lower watershed is 110,500 acres. Within the upper watershed, the major landuses are grazing, recreation and mining. Approximately 35% of this area is public lands managed by the BLM. Within the lower watershed the major landuse is irrigated cropland. The City of Mendota lies within the lower watershed. This project proposal will focus predominantly on the lower watershed, from I-5 to the San Joaquin River. Currently, approximately 50% of the channel occupies a narrow meander belt, however the remainder is strictly confined by roads and drainage ditches. Very little riparian vegetation occurs along Panoche Creek downstream of I-5 and the adjacent uplands are comprised almost entirely of agricultural land.

#### c. Expected Benefits

The benefits are expected to include seasonal riparian habitat restoration, upland saltbush scrub/grassland habitat restoration, erosion control, flood control and the reduction of contaminants that enter the San Joaquin River. Species expected to benefit from these actions include, San Joaquin kit fox, tricolored blackbird (nesting habitat could be encouraged adjacent to the flood plain and the uplands would provide excellent foraging habitat), blunt-nosed leopard lizard, Nelson's antelope ground squirrel, raptors, migratory birds and other resident birds. The juxtaposition of a riparian corridor with Valley Grassland and Saltbush Scrub habitats would provide an ideal habitat for a number migratory raptors such as Swainson's, red-tailed, and ferruginous hawks.

The Partners In Flight program has determined that the number one priority for the conservation of California birds is riparian habitat protection and enhancement. There are no other riparian corridors to serve as nesting and migratory stop-over sites on the west side of the San Joaquin Valley. Upland habitat restoration would result in habitat suitable for most of the San Joaquin suite of listed desert-adapted animal species. These upland habitats would connect with the large blocks of T&E occupied habitats to the west surrounding the Panoche and Tumey Hills. These areas are considered by the San Joaquin Valley Endangered Species Recovery Planning Program as core areas necessary for the recovery of the San Joaquin kit fox, giant kangaroo rat, blunt-nosed leopard lizard and Nelson's antelope ground squirrel.

Acquisition of these lands will benefit the CVPIA Land Retirement Program, and the San Joaquin Valley Drainage Program goals, as well as providing some relief from a primary stressor of the San Joaquin River-- contaminant loading.

#### d. Background and Biological/Technical Justification

Selenium, boron, and asbestos are naturally occurring elements in the marine shale formations which occur in the upper watershed of Panoche Creek, particularly in the Kreyenhagen Shale Formation. These shales have been weathering and eroding for thousands of years and the sediment has been deposited in large alluvial fans from the foothills to the San Joaquin Valley Floor. During storm events these selenium and salt-laden sediments are deposited on cropland, on county and city streets, in local water delivery systems, community water supplies, and into the Mendota Pool, a 500-acre wildlife and recreation area. These sediments ultimately end up in the San Joaquin River, via the Mendota Pool or from other overland flow. Total (dissolved and sediment bond) selenium concentrations have been measured as high as 489ug/l and dissolved as high as 45ug/l in Panoche Creek (Vargas, CVRWQCB). Water quality objectives for protection of wetland water supplies are 2 ug/l as identified in the Water Quality Control Plan for the San Joaquin River. The 1992 California State Water Quality Assessment describes the entire length of the Panoche-Silver Creek as impaired by sedimentation and selenium and as having an aquatic life impairment.

The Panoche alluvial fan is the principal source area of selenium to the Grassland watershed and

to the San Joaquin River. In order to address problems associated with Panoche Creek and contaminants, a Coordinated Resource Management Planning Group was formed in 1989, and consists of ranchers, farmers, representatives of local, state and federal agencies. BLM is a member of the planning team and is actively using its land exchange program to acquire lands in the upper watershed area. Best management practices and active habitat restoration projects are being done on the public lands in the upper watershed to reduce erosion and improve the water quality of Panoche Creek.

Historically, there was no defined channel for Panoche Creek. Channels distributed water and sediment across the upper and middle portions of the alluvial fans. At the toe of the fan, the size and carrying capacity of the distributory channels decreased, causing floodwaters to spread over the fan, decreasing the flow's velocity and depositing the selenium and salt rich sediments it carried onto the valley floor.

This natural system has been replaced by a channel modified to minimize flooding of the agricultural lands on the alluvial plain. The channel is quite narrow and severely restricts the stream's flow, causing downcutting and erosion. This restricted channel goes from just west of I-5 to Belmont Avenue. East of Belmont, runoff travels overland, flooding the City of Mendota and transporting selenium-rich sediments to water delivery canals, onto the City's water supply well field and to the San Joaquin River. In the January 1997 flood events, these floodwaters and their accompanying sediments overwhelmed the Grasslands Bypass Project and made it impossible for the Project to meet its discharge requirements to the San Joaquin River. The sediments damaged the Bypass and the other canals in the vicinity, as well as causing damage to the City and county streets, and agricultural lands. (Grassland Area Farmers report to RWQCB, April 1997).

Currently, lands are being farmed right up to the Panoche Creek channel. This active channel causes a high degree of erosion and land loss due to streambank sloughing, etc.. Vegetation/habitat is being lost due to agricultural practices, channelization of the streambed, and to erosion.

Irrigation of these selenium-laden soils causes degradation of the groundwater. Depending upon location, soil type, crop and water management practice, concentrations of selenium range from 20 ppb to over 200 ppb in shallow groundwater. Depth to groundwater ranges from 0 to 20 feet, with an average depth of 5 feet in the project area.

In an effort to reduce groundwater and surface water quality impacts, the Department of Interior is seeking to retire lands from irrigated agriculture. This Land Retirement Program has been authorized by the Central Valley Project Improvement Act or CVPIA of 1992.

Land Retirement seeks to acquire land, water and other property interests from willing sellers for the purposes of drainage source reduction, water quality improvement, wildlife habitat improvement, and the acquisition of water for other CVPIA purposes. Condemnation will not be used as a means to acquire lands. Acquisition may be done in fee or by easement, depending upon the terms offered by the seller. The Land Retirement program will be used in partnership with CALFED monies to acquire a corridor along Panoche Creek. The ultimate goal is to provide a continuous riparian corridor from Mendota Pool to the headwaters of Panoche and Silver Creeks.

Implementation of this project will result in the re-establishment of a functioning riparian and upland ecosystem in an environmentally sensitive area of highly erodible, selenium-laden soils. Other alternatives to deal with the Panoche Creek situation have involved construction of detention dams in various places within the watershed. To date, these other alternatives have failed to progress due to high development costs and the ongoing maintenance and liability costs, as well as potentially adverse environmental impacts of building such structures. They have not been proven as effective, nor economically viable solutions. We believe that restoration of the creek corridor ecosystem is a more holistic and longer lasting solution that will be environmentally friendly as well as an economically sound investment.

#### e. Proposed Scope of Work

This project will be completed in three Phases, however this funding request is only for the first phase.

<u>Phase I-Acquisition</u>: includes appraisals to determine fair market value, environmental analysis, hazmat survey, land use planning and actual purchase of the lands. All of the above-mentioned reports will be provided as documentation of completion of this phase of the project. This project will focus on acquisition of a corridor along Panoche Creek from Mendota to I-5, approximately 17 miles long and 1 mile wide, for a total of 10,880 acres. Phase I is expected to take 3 years, but could be sooner if funding is increased.

Phase II-Project Design: involves the actual location and specifications for construction of the stream channel and any contouring or microtopography modifications involved in habitat restoration of the corridor. Phase II is expected to take 9-12 months. Funding for this phase is expected to come from Bureau of Reclamation appropriated funds, with technical assistance from our partners, such as NRCS and USGS.

<u>Phase III-Implementation</u>: Construction of the channel, restoration of the habitat and the implementation of long-term management and monitoring for flood control, drainage reduction, habitat restoration and utilization success, and water quality improvements. Funding for this phase is expected to come from the CVPIA Restoration Fund.

#### f. Monitoring and Data Evaluation:

To determine the effects of the projects, monitoring will be done on a regular basis, according to a monitoring plan as defined in the NEPA/Land Management document that will be completed prior to Phase I Acquisition. Proponent has begun gathering preliminary data and expects to begin NEPA process by September 1997 and to complete this plan by December 1997.

Resources to be monitored will include water quality sampling of Panoche Creek and groundwater wells located within the proposed corridor as well as those within the zone of impact of these retired lands. Transects will be used to determine habitat restoration success and its utilization by targeted species. Data collection will be in coordination with other programs like the San Joaquin River Management Plan (SJRMP), San Joaquin Valley Recovery Planning Program (RPP) and local water and drainage district sampling programs.

#### g. Implementability:

This project will be implemented in compliance with all applicable laws and regulations. Lands will be acquired from willing sellers and we have had several landowners apply to the Land Retirement Program, so it is evident that there are willing sellers in the area. This project will be done in coordination with other CALFED and CVPIA programs and projects, and funding will come from multiple sources.

#### IV. Costs

This proposal seeks a Block Grant for funding the <u>actual purchase price of land</u> in the amount of \$4 million dollars. No overhead or other charges will be levied against this grant. All planning, overhead and construction costs will be charged to the CVPIA Land Retirement Program or other federal appropriated funds, or will come from services donated by our partners.

#### Estimated area to be acquired:

19 miles of corridor x 1 mile wide= 19 square miles x 640 acres=12,160 acres

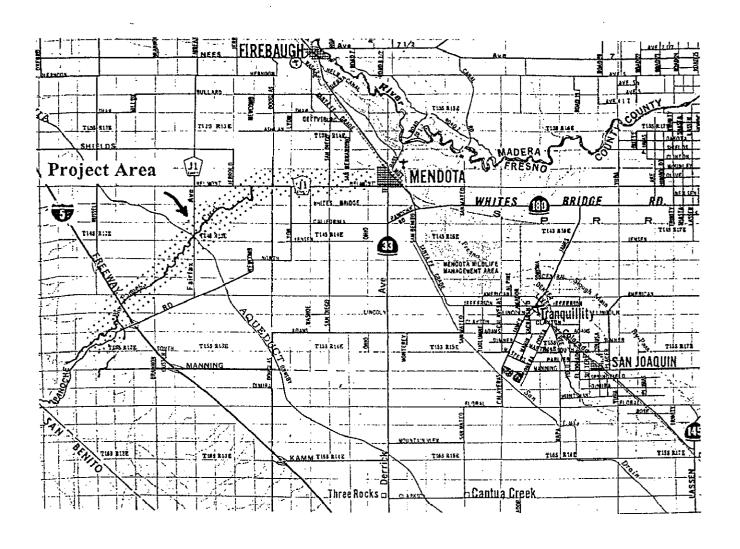
#### Acquisition Cost:

12,160 acres x \$2000/acre estimated value=\$24,320,000

#### Funding Partnerships:

	\$24,320,000
Westlands Water District	\$9,000,000
CALFED Request	\$4,000,000
1999 CVPIA Land Retirement Program	\$6,000,000
1998 CVPIA Land Retirement Program	\$3,320,000
1997 CVPIA Land Retirement Program	\$2,000,000

Figure 1. Project Location Map, Panoche-Silver Creek Watershed.



Fresno County, California



DEPARTMENT OF WATER RESOURCES
3374 East Shields Avenue
Fresno, CA 93726



July 23, 1997

Mr. William H. Luce, Jr. Area Manager U.S. Bureau of Reclamation 2666 North Grove Industrial Drive Suite 106 Fresno, California 93727

Dear Mr. Luce:

The Department of Water Resources Drainage Reduction Program supports your request for funding for the Panoche Creek-Silver Creek Riparian Habitat & Flood Control Corridor. Acquisition of the associated parcels and implementation of this project would make a positive contribution toward the Departments goals of drainage reduction and water quality improvement.

Clu Cotter

Drainage Reduction Program
Department of Water Resources